U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-009 -EA

CASEFILE/PROJECT NUMBER: COD-035705 (3G1, 3G2, 3G3, 3G4, 3G5, 3G6, & 3G8), COD-035729 (3G7, G9)

PROJECT NAME: 9 APDs for wells Piceance Creek Unit (PCU):
PCU T75X-3G1, -3G2, -3G3, -3G4, -3G5, -3G6, -3G7, -3G8, & -3G9

LEGAL DESCRIPTION: T. 2S, R.97W, NESE sec 3, 6thP.M.
Surface location is the same for all nine wells.

APPLICANT: ExxonMobil Oil Corporation

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: ExxonMobil Oil Corporation (Exxon) proposes to drill nine (9) wells from the same well pad. An additional 0.10 mile (40' right of way (ROW) x 528') of new access road would be constructed (total acres=0.48) and a road reroute (152' x 40') off an existing road around the well pad would be required (0.14 ac.). The well pad size would be approximately 450' x 530' (5.50 ac.) with an adjacent production pad along the access road approximately 80' x 200' (0.37 ac.). Two steel pipelines (6"gas and 3"water) would be buried adjacent to access road for 675' (ROW approx. 40') to a tie in point with existing pipelines. Pipeline ROWs would overlap with new access road ROW to minimize new surface disturbance during construction/burial of pipelines. Approximate surface disturbance of the pipelines would be 0.62 acres. Total acres of new surface disturbance on BLM would be approximately 7.5 acres (including cut/fill slopes).

All roadside and well location cut and fill slopes will be revegetated immediately after construction with the seed mixture specified in the conditions of approval. Such revegetation will be either temporary or permanent.

Revegetation operations will start immediately following the completion of recontouring/dirt work operations.

Reserve pit fencing will comply with BLM specifications as described in the BLM Gold Book (Fourth Edition, 2005). Reserve pit fence specifications will be included as part of the Conditions of Approval.

For the proposed action a hydro-ax or other mulching type machine must be used to remove the existing cover of trees for the pad and access road. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and scatters the debris, thereby eliminating any hazardous fuel load adjacent to the new road and well pad which could hinder wildfire suppression efforts to protect the 138Kv powerline that the pad will be adjacent to.

The maximum grade of the access road would not exceed 4%.Corrugated metal pipes (CMPs) would be placed as needed. Surfacing material would be hauled over existing roads from a source not yet identified and placed as needed. No cattleguards would be required for this location. The proposed access road would be flagged prior to construction. Water would either be piped with surface lines or trucked over access road. Remaining clear water would be pumped or hauled forward from previous wells after surface casing is set.

Drill cuttings would be disposed of in the reserve or dry cutting pit and buried with at least 4’ of cover. Exploration and Production (E & P) waste would be handled as defined, prescribed or permitted by the Colorado Oil and Gas Conservation Commission (COGCC) Rules. Any drilling mud with greater than 1% diesel net weight would be hauled to a proper disposal site. An alternative to hauling would be solidification in the pit with method approved by the COGCC. All mud cuttings will meet these requirements before being buried or removed from the location. All cuttings will have all harmful properties of the waste reduced or removed and the mobility of leachate constituents reduced or eliminated. The BLM will be contacted prior to testing the cuttings of the first well so that the BLM may witness the testing procedures.

Trash, wastepaper, and other garbage would be contained in a fenced trash cage and hauled to a commercial disposal site. Salts that are not used in the drilling fluid would be removed from the location by the supplier. Sewage from the trailer houses will be disposed of in a manner meeting the Rio Blanco County (RBC) Regulations, as under the guidance of Colorado Water Quality Control Commission, Department of Public Health and Environment. Portable, self-contained chemical toilets will be provided for human waste disposal. Upon completion and as needed the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. Chemicals that are not used in the drilling and completion of the well would be removed from the location by the supplier.

Drilling fluids would be allowed to evaporate in the reserve pit until the pit is dry enough for back filling. Water produced during tests would be disposed of in the reserve pit as per Onshore Order #7. Oil produced during tests would be stored in test tanks until sold, at which time it would be hauled from the site. In the event fluids in the pit do not evaporate in a reasonable time, the fluids would be hauled to a state approved disposal site or would be mechanically

evaporated. The reserve pit would be fenced on three sides with 4 strand barbed wire during drilling and on the fourth side after the rig is released.

No camps, airstrips, etc. would be constructed. All equipment and vehicles will be confined to the access road and well pad.

Mud pits in the active circulation system would be steel pits. The reserve pit may be lined with an impermeable liner if needed to hold fluid.

If snow is encountered, the snow would be removed before construction begins or the topsoil is disturbed, and placed downhill of the proposed topsoil stockpile.

All available topsoil would be stripped on well locations and access roads, prior to construction, and stockpiled for use in reclamation of the site. Topsoil stockpile would be clearly segregated from any spoil pile and placed where it can be easily retrieved without impact to natural features.

Unneeded disturbed surfaces remaining after completion to the surface production facilities would be shaped to match the surrounding terrain and seeded as specified by the BLM.

An archaeological investigation and report will be prepared for the proposed access road and well site by Archaeological-Environmental Research Corporation and submitted to the BLM.

Completed wells on this pad will continue to produce during drilling operations per ExxonMobil Simultaneous Operations guidelines.

Upon completion of the operation and disposal of trash and debris as prescribed above, pits would be backfilled and recontoured as soon as practical after they have dried.

When the well is abandoned, ExxonMobil would rehabilitate the road and location as per BLM specifications. Revegetation of the drill pad would comply with BLM specifications. Rehabilitation operations would start in a timely manner following the completion of operations, typically the following construction season.

Approximate date proposed action work would start is 12/15/06.

No Action Alternative: The application would be denied with, no environmental impacts occurring as a result of the proposed action.

NEED FOR THE ACTION: To respond to the request by the applicant to construct access road, well pad, drill wells, and install pipelines to exercise lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5

Decision Language: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is not located within a thirty mile radius of any special designation air sheds or non-attainment areas. The National Ambient Air Quality Standards (NAAQS) requires average particulate mater to be less than or equal to 150 $\mu g/m^3$ for a maximum 24-hour period.

Environmental Consequences of the Proposed Action: Exhaust produced from production facilities and heavy equipment associated with the proposed actions combined with the increasing number of fluid mining activities in the Piceance Creek basin will have cumulative impacts detrimental to local air quality. During dry and windy periods, air quality may be compromised due to increased levels of fugitive particulate matter which is defined as fugitive emissions of particulate matter that are the direct or proximate result of man's activities (e.g. materials left by man exposed to the wind or later acted upon by another force as the wind or automobile traffic, or particulate matter being thrown into the atmosphere by the operation of a heavy equipment). Overall, the proposed action by itself should not greatly compromise NAAQS on an hourly or daily basis. In addition, following successful reclamation, particulate mater is likely to return to pre-construction levels.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations. To minimize production of fugitive particulate matter, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing the roadway with gravels will also help mitigate production of fugitive particulate matter.

To reduce production of fugitive particulate matter originating from well pads and associated stockpiled soils (long term storage) interim reclamation shall be required. Interim reclamation will consist of all excess stockpiled soils associated with pad construction being pulled back over the portion of the well pad not being utilized for production facilities and access. Portions of the well pad undergoing interim reclamation will be returned to grade (as close as possible), promptly re-seeded, and biodegradable fabrics will be utilize on slopes exceeding 5%.

If interim reclamation is not practical (e.g. completion of drilling operation will require an extended period time (multiple well pads)), stockpiled soils will be covered with biodegradable fabrics such as (but not limited to) jute netting and seeded with the appropriated seed mixture. Furthermore, soils stockpiled for short durations (e.g. during road/pipeline construction/maintenance) will be wetted during dry periods to reduce production of fugitive particulate matter.

CULTURAL RESOURCES

Affected Environment: The proposed pad location has been inventoried at the Class III (100% pedestrian) level (Metcalf 2005, Compliance Dated 10/21/2005) with no cultural resources identified in the inventoried area.

Environmental Consequences of the Proposed Action: The proposed action will not directly affect any known cultural resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places

- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed action occurs approximately three miles west of the Magnolia oil and gas development complex. The complex itself has infestations of virtually every known noxious and problem weed in the White River Field Office (WRFO) area with major infestations of black henbane, mullein, houndstongue, diffuse knapweed, and bull thistle. The invasive alien cheatgrass is also found throughout the Magnolia area in association with un-reclaimed areas of earthen disturbances.

Environmental Consequences of the Proposed Action: The proposed action will disturb about 7.5 acres. The areas of soil disturbance if not promptly and effectively revegetated, will provide safe sites for the establishment of noxious weeds and cheatgrass.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation

Mitigation: The operator will be required to monitor the project area for a minimum of three years post disturbance and eradicate all noxious and invasive species which occur on site using materials and methods approved in advance by the Authorized Officer.

MIGRATORY BIRDS

Affected Environment: The proposed project site consists of a relatively younger age-class ridgeline pinyon-juniper stand bisected by two 2-track roads and traversed on the north by a 138kV powerline. The stand has been heavily altered on either side of the road, and the canopy

largely removed 50 yards west of the road by past woodcutting activity. The understory is sparse and is predominantly herbaceous. These young, modified woodland stands generally support a normal contingent of migratory birds, but at reduced densities. Birds of higher conservation interest nesting in the vicinity of the project include black-throated gray warbler and gray flycatcher.

Environmental Consequences of the Proposed Action: Because of very long timeframes associated with the development of these multiple-hole wells (i.e., 7-8 months barring complications), the likelihood of high intensity well development activities being concurrent with one or two migratory bird nesting seasons would be high. In the event northern goshawk nesting provisions were emplaced on this project, pad construction and disruptive development activity would be relegated to periods outside the nesting season (April-July) although vegetation clearing would persist in removing about 8 acres of woodland habitat. If these protective provisions are not used, it is likely that birds would avoid nesting or nest at much lower densities within at least 50 yards of disturbance (an additional 10 acres). In the worst case, and considering the habitat quality in the vicinity, this project would be expected to adversely affect about 18 acres of habitat supporting up to 6 pairs of birds of higher conservation interest. There are no feasible means to reduce or avoid localized disruption of migratory birds in these instances without foregoing the long term advantages associated with multiple well pads exploiting 100-200 acres of surrounding gas reserves (i.e., alternative of more numerous pads and more expansive road and pipeline network).

The development of reserve pits in the project area may be expected to attract waterfowl and other migratory birds for purposes of resting, foraging, or as a source of free water. It has recently been brought to the White River Field Office's attention that migratory waterfowl (i.e., teal and gadwall) have contacted oil-based drilling fluids stored in reserve pits during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of the problem is not well defined, but until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with produced water and drilling and completion fluids which may pose a problem (e.g., acute or chronic toxicity, compromised insulation).

Environmental Consequences of the No Action Alternative: There would be no action authorized that would influence migratory bird nesting activity.

Mitigation: The operator shall prevent use by migratory birds of reserve pits that store or are expected to store fluids which may pose a risk to such birds (e.g., migratory waterfowl, shorebirds, wading birds and raptors) during completion and after completion activities have ceased. Methods may include netting, the use of bird-balls, or other alternative methods that effectively prevent bird use and that meet BLM approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to prevent bird use two weeks prior to beginning completion activities. The BLM-approved method will be applied within 24 hours after completion activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineering Technician immediately.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed action is located within the Dudley Gulch catchment area which is an ephemeral tributary to Piceance Creek (tributary to the White River). Dudley Gulch is situated within stream segment 16 of the White River Basin. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list, the White River ROD/RMP, and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. It should be noted that the White River from Piceance Creek to Douglas Creek has been listed on the states monitoring and evaluation list (M&E list) for sediment impairments. As a tributary to Piceance Creek, all surface disturbing activities in Dudley Gulch will directly influence sedimentation rates to lower portions of the drainage basin.

Stream segment 16 of the White River Basin has been designated "Use Protected". The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. The state has classified segment 16 as being beneficial for the following uses: Warm aquatic life 2, Recreation 2, and Agriculture. For stream segment 16 minimum standards for four parameters are listed as follows: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli.

Ground Water: A review of the US Geological Survey Ground Water Atlas of the United States (HA 730-C) was done to assess ground water resources at the location of the proposed action. The shallowest aquifer underlying the proposed action is the Uinta-Animas aquifer. The Uinta-Animas aquifer at this location consists of the Uinta Formation and the Parachute Creek member

of the Green River Formation. During the drilling process it is likely that deep ground water from the Fort Union Formation and Mesaverde Group also be encountered.

Environmental Consequences of the Proposed Action: Further use of the access road and additional development on the well pad will increased soil exposure to erosional processes. Heavy equipment use will destroy any existing vegetation and increase compaction. Increased compaction combined with reduced vegetation will decrease infiltration rates and elevate erosive potential due to runoff (overland flows) and raindrop impact during storm events.

Local ground water may be contaminated if a spill results or pit contents are allowed to infiltrate soils. Adverse impacts on deeper ground water are possible as a result of cross aquifer contamination due to drilling.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal water quality regulations as well as providing documentation to the BLM that they have done so. Any upgrades to the existing road and well pad must strictly adhere to "Gold Book" surface operating standards for oil and gas exploration and development. CMPs are not recommended on slopes less than 10% and will NOT be used as drainage relief structures for stream crossings/gullies or to drain inside drain ditches on slopes less than 3%. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations.

Energy dissipaters such as large gravels/small cobbles will be used at culvert and drainage dip outlets to minimize additional erosion. To mitigate water being channelized down the roadway, all activity must stop when soils or road surfaces become saturated to a depth of three inches. Mud blading will be prohibited in attempts to reduce further soil displacement. Any upgrades or damage to the existing access road will be upgraded or repaired at the expense of the operator. Furthermore, following abandonment of the well pad all disturbed surfaces will be recontoured to the original grade promptly covered with a sufficient amount of woody debris and seeded with the appropriate seed mixture as outlined in the vegetation section of this document.

To mitigate surface erosion at well pads, interim reclamation will be required. Interim reclamation will consist of all excess stockpiled soils associated with pad construction being pulled back over the portion of the well pad not being utilized for production facilities and access. Portions of the well pad undergoing interim reclamation will be returned to grade (as close as possible), promptly re-seeded, and biodegradable fabrics will be utilize on slopes exceeding 5%.

If interim reclamation is not practical (e.g. completion of drilling operation will require an extended period time (multiple well pads)), stockpiled soils will be covered with biodegradable fabrics such as (but not limited to) jute netting and seeded with the appropriated seed mixture.

To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under pumping equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, all

pits shall be lined and all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed to reduce potential for contamination.

Finding on the Public Land Health Standard for water quality: Stream segment 16 of the White River Basin currently meets water quality standards set by the state. Following suggested mitigation measures, water quality in the affected stream segment will be unaffected by the proposed action and continue to meet standards.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACECs, flood plains, wetland or riparian communities, prime and unique farmlands, habitat or populations of threatened or endangered animals or plants, or Wilderness and Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the Natural Resource Conservation Service (NRCS) in Rio Blanco County, CO. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
70	Redcreek- Rentsac complex	5-30%	PJ woodlands /PJ woodlands	<2	Very high	Moderate to high	10-20
73	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20

70-Redcreek-Rentsac complex (5 to 30 percent slopes) is located on mountainsides and ridges. The native vegetation is mainly pinyon and juniper trees with an understory of shrubs and grasses. Elevation is 6,000 to 7,400 feet. The average annual precipitation is 14 to 18 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 85 to 105 days. The Redcreek soil is shallow and well drained. It formed in residual and eolian material derived dominantly from sandstone. Typically, the surface layer is brown sandy loam about 4 inches thick. The next layer is brown, calcareous sandy loam about 7 inches thick. The underlying material is very pale brown, calcareous channery loam 5 inches thick. Hard sandstone is at a depth of 16 inches. Depth to hard sandstone or hard shale ranges from 10 to 20 inches. Permeability of the Redcreek soil is moderately rapid. Available water capacity is very

low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to high.

The Rentsac soil is shallow and well drained. It formed in residuum derived dominantly from sandstone. Typically, the upper part of the surface layer is grayish brown channery loam about 5 inches thick. The next layer is brown very channery loam about 4 inches thick. The underlying material is very pale brown extremely flaggy loam 7 inches thick. Hard sandstone is at a depth of 16 inches. Depth to hard sandstone or hard shale ranges from 10 to 20 inches. Permeability of the Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to high.

73-Rentsac channery loam (5 to 50 percent slopes) is a shallow, well drained soil located on ridges, foothills, and side slopes. It formed in residuum derived dominantly from calcareous sandstone. The native vegetation is mainly pinyon, juniper, brush, and grasses. Elevation is 6,000 to 7,600 feet. The average annual precipitation is 14 to 18 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 80 to 105 days. Typically, the surface layer is grayish brown channery loam about 5 inches thick. The next layer is very channery loam about 4 inches thick. The underlying material is extremely flaggy light loam 7 inches thick. Hard sandstone is at a depth of 16 inches. Depth to sandstone ranges from 10 to 20 inches. Permeability of this Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is moderate to very high.

Environmental Consequences of the Proposed Action: The well pad, access road and pipeline are situated on soils which have been identified as having moderate to very high erosive potential. Improper drainage from the project areas will increase potential for overland flows accelerating erosion rates leading to soil piping, head cutting and gully formation. Removal of limited ground cover will also expose soils to erosional processes. Heavy traffic will increase soil compaction decreasing infiltration rates which in turn will also increase potential for erosive overland flows.

Leaks or spills of environmentally unfriendly substances on or near the pad may contaminate soils hindering revegetation efforts. Soils unable to support a healthy plant community will be less cohesive (due to lack of root structure) and more vulnerable to erosional processes.

Environmental Consequences of the No Action Alternative: None

Mitigation: Comply with Interim reclamation will be required as addressed in the Air and Water Quality portions of this document. Complete reclamation will follow abandonment of well pad. Access road and well pad will be recontoured and 100% of disturbed surfaces will be revegetated with the suggested seed mixture as outlined in the vegetation section of this document.

Finding on the Public Land Health Standard for upland soils: At the present time, soils in the vicinity of the proposed action exhibit infiltration and permeability rates that are appropriate to soil type, landform, climate, and geologic processes. The proposed actions will

cause decreases in both infiltration and permeability rates due to soil compaction and loss of vegetal cover. However, with proper mitigation soils health standards will continue to be met.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed action occurs in a mid seral pinyon –juniper woodland.

Environmental Consequences of the Proposed Action: The principal impact to vegetation will be complete removal of vegetation on the well site, access road and pipeline and the earthen disturbance associated with it. In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if invasive species (cheatgrass) or noxious weeds are allowed to establish and proliferate on the disturbed areas resulting from pad and access road construction.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly revegetate all disturbed areas not necessary for production with Native Seed mix #3. Revegetation will commence immediately after construction and will not be delayed until the following fall and will include cut and fill slopes and access road borrow ditches and slopes. Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application. Debris will not be scattered on the pipeline until after seeding operations are completed.

Seed Mix #	Grass Species	Lbs PLS/Ac	Ecological Site
3	Western wheatgrass (Rosanna) Bluebunch wheatgrass (Whitmar) Needle and thread Indian ricegrass (Rimrock) Fourwing saltbush (Wytana) Utah sweetvetch	2 2 1 2 1 1	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Upland plant communities in the proposed project area currently meet the Standard and are expected to continue to do so following implementation of the proposed action.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: Private and State-owned portions of Piceance Creek are the nearest aquatic habitats to the proposed project. The function and condition of this large perennial system is heavily influenced by summer-long irrigation use for hay production and livestock use, including winter feeding and spring calving activities. The pad and access is separated from Piceance by about 2 miles of ephemeral channel and the Division of Wildlife

parcel located about 1.5 miles downstream of that point. Although seasonally constrained, Piceance Creek continues to support populations of native fish and amphibians, including young flannelmouth suckers and speckled dace and northern leopard frogs. Occasional trout appear in collections, but these fish are likely stocked fish that have escaped from privately-owned upstream ponds.

Environmental Consequences of the Proposed Action: Considering the miles of ephemeral channel separating the proposed action from Piceance Creek, and with the application of standard Conditions of Approval (COAs) and Best Management Practices (BMPs), there is little likelihood that Piceance Creek would receive anything but nominal increments of fugitive sediments from surface use activities associated with the proposed action. These additional sediment contributions would be discountable and have no functional influence on the status of downstream aquatic habitats.

Environmental Consequences of the No Action Alternative: There would be no potential for sediment or contaminant contributions to Piceance Creek and downstream aquatic habitats.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The Public Land Health Standards are not appropriately applied to private land parcels and the nearest BLM-administered parcel is well removed (about 10-miles downstream). However, the subtending portions of Piceance would likely be rated as functioning-at-risk with a static trend. Heavy winter and spring livestock use and summer-long irrigation practices suppress proper channel function and vegetation expression. With the application of standard conditions of approval (COAs) and best management practices (BMPs), there is little likelihood that Piceance Creek would receive anything but nominal increments of fugitive sediments from surface use activities associated with the proposed action. These additional sediment contributions would be discountable and have no functional influence on the status of downstream aquatic habitats.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The project area is situated within pinyon-juniper woodlands (about 6800') that are generally occupied by mule deer and elk from September through May and whose most important function is served during the severe winter period (January through mid April) when temperatures are most severe, snowpack limits accessibility to forage and cover resources, and animal conditions are at their lowest ebb. These severe winter ranges, by nature of their important function and limited extent, are additionally categorized as critical habitat by the Colorado Division of Wildlife (CDOW); by definition, the loss of which tends to depress the capacity of the overall range to support former animal abundance. The particular ridgeline habitats affected by the proposal normally accumulate heavy snowpacks and are not closely associated with shrub forage and consequently do not generally support strong populations of deer during the late winter period. These sites are usually more heavily used during the spring as snowpacks recede and emerging herbaceous growth becomes available.

This proposed location and a 500-foot buffer beyond the edge of proposed disturbances were surveyed for woodland raptor nest activity by wildlife consultants to BLM standards in October 2005. No evidence of nesting activity was found. However, as recently as 1998, BLM had located a pair of northern goshawk nests (one active) about 400-500 feet from the edge of the proposed pad. During the June 2005 on-site, a male goshawk was observed by a BLM biologist within several hundred feet of the proposed location. The proposed site was moved during the onsite to remove the pad as far as possible from the drainage known to be occupied in the past by nesting goshawk. The pad presently straddles a ridge at the upper end of the drainage and extends about 180' into the drainage that had been occupied by hawks. The site incorporates an existing 2-track road and, on the side oriented toward the nest, is confined to an area that was heavily cutover for fuel wood in the past and recently modified for powerline fire protection. The pad was also moved toward the north and butts as closely as possible to a 138-kV powerline corridor. The pad location now involves a young, open-canopied ridgeline woodland stand that contains few old-mature trees.

Environmental Consequences of the Proposed Action: The proposed development program consists of drilling up to 9 holes from a single pad (usually in two 4-5 well stages). Drilling 4-5 wells is anticipated to require 4.5 to 6 months with an additional 2 months of intensive activity for well completion activities (6.5-8 month total). These timeframes drastically limit the flexibility of scheduling disturbance outside the period of deer occupation, particularly when competing resource objectives (e.g., protection of nesting raptors) are involved. Further, the Piceance Creek Unit is being rapidly and heavily developed such that area roads are subject to frequent vehicle traffic associated with project maintenance and development activities. Development of this well is not considered a significant new intrusion on Magnolia's big game winter ranges. At this time, the development of a single large multi-hole pad that involves long periods of intense localized activity is considered preferable to alternatives requiring multiple 3 to 4-acre pads and a more expansive network of attending access roads and pipeline corridors. It is believed that the proposed action offers short term advantages in reducing the density and pervasiveness of activity loci (e.g., well/pipeline maintenance and monitoring) on these winter ranges and longer term advantage in reducing the absolute acreage devoted to long term industrial use (i.e., prolonged reductions in the availability of woodland cover and woody forage). Although application of a severe winter range stipulation is applicable to this action, it is recommended that this action be excepted for the preceding reasons.

This pad was moved specifically to minimize its long term influence on the character of woodlands occupied by goshawk in the adjacent basin. This move was not sufficient to eliminate the risk of nest disruption in the event the birds reoccupied the nest sites mapped in 1998 and it was intended that supplemental timing limitations be applied to maintain the utility of this nest habitat. Although these or alternate nests were not found during 2005 surveys, BLM is compelled to perform further surveys (winter 2006) to ensure that northern goshawks have not recently occupied sites in the vicinity of this pad. At this time, there appears to be sufficient evidence to indicate that northern goshawk continue to use adjacent stands for nesting. During the on-site, BLM suggested that Exxon plan these drilling and completion activities to avoid the nesting period of April through July. At that time, Exxon representatives believed that avoidance window would be workable. The final decision to impose a COA designed to prevent adverse

disruption of northern goshawk nesting activities will be made by BLM after follow-up surveys are completed.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would disrupt wildlife use functions or disturb functional forage and cover components. However, surrounding and previously authorized activities would continue to have these effects, thought at a somewhat reduced level.

Mitigation: Evidence suggests that nesting goshawk remain in areas subject to disturbance by the proposed action. The proposed action is subject to a timing limitation that would restrict any activity associated with the development of this well to periods outside the goshawk nesting season of April 1 through July 31. In the event the birds fledge young and leave the area prior to this date, a modification to the timing limitation would be allowed. This project site will be surveyed by BLM during the winter of 2006 to determine whether northern goshawks continue to occupy nest sites in the vicinity of this pad. The final decision to impose or remove this requirement (through an exception) will be made by BLM after follow-up surveys are completed.

The use of interim reclamation techniques will be used to the extent practicable on this pad such that: 1) all available topsoil material would be used to rehabilitate recontoured cut and fill slopes and areas outside the anchors (maintaining the viability of the soils for final reclamation), 2) production facilities are located to maximize the extent of surface disturbance available for recontouring and reclamation after completion operations and through the productive life of the well (e.g., where access road enters pad), and 3) disturbed areas are recontoured, revegetated, and, if necessary, effectively fenced to control livestock use once well completion activities have been finalized (this includes cut and fill slopes of roads and trial application on the roadbeds themselves).

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The landscape surrounding the project area presently meets the Public Land Health Standard. Actions have been integrated into the proposed action that would help reduce adverse, long-term modifications of adjacent woodland habitat as big game winter range and woodland raptor nest habitat. Development activity would detract locally from the utility of these habitats for big game spring use in the short term, but mitigation designed to avoid ongoing nest functions have been imposed. These measures do not eliminate incremental short term deterioration in the condition and function of wildlife habitats in the project area, but allow for continued long term meeting of the Standard.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Cadastral Survey	X		
Fire Management			X
Forest Management			X
Geology and Minerals			X
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Range Management			X
Realty Authorizations		X	
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: BLM road 1175 will be primary access to this proposed location. The proposed location is within an area where motorized travel is limited to "existing routes." Persistent route that is the proposed route to access pad from BLM 1175 is considered closed and abandoned.

Environmental Consequences of the Proposed Action: BLM 1175 will likely see increased traffic associated with the construction of well pad. It is likely that if road is utilized during moist periods, the road surface will deteriorate making public travel difficult or impossible.

Environmental Consequences of the No Action Alternative: None.

Mitigation: BLM 1175 should be maintained to BLM road maintenance level 3 by project proponent. In addition, a gate should be installed where new pad access roads leaves BLM 1175 to assure no unauthorized motorized traffic utilizes new road.

FIRE MANAGEMENT

Affected Environment: The proposed action is situated within pinyon-juniper (PJ) woodlands that were treated in October 2003 to reduce the threat of damage by wildfire to the 138Kv powerline which supplies power to the Piceance Basin. This project was designed in collaboration with Rio Blanco County, and White River Electric Association and was a Council on Environmental Quality pilot project for the Healthy Forest Initiative. This project was and remains a flagship project for hazardous fuel reduction projects within the BLM and the DOI.

Numerous hours of federal time and energy have been invested in the planning and lay-out of units for treatment so that the units blend into the environment and were of a mosaic nature. Approximately $23,000 was spent developing the Environmental Assessment (EA) according to Council on Environmental Quality (CEQ) requirements for Healthy Forest Initiative (HFI) projects. The cost to implement the on the ground portion was approximately $47,000, totaling approximately $350.00 per acre to treat the PJ stands underneath and adjacent to the powerline. Environmental Assessment CO-110-2005-137-EA signed in June 2005 constructed 0.65 acres of pipeline right-of-way through the same project, however all trees were removed from that unit. It was determined that the pipeline corridor would aesthetically blend into the unit's appearance, be a temporary impact not noticed once vegetation was established, and not jeopardize the revegetation process stipulated in the original powerline project.

Environmental Consequences of the Proposed Action: The proposed action will essentially destroy 2.5 acres of treated PJ from a project that is only two years old. The project was considered a high priority project for both local governments as well as high ranking Department of Interior (DOI) officials. Due to the relative new nature of the project and the high cost per acre the proposed action will essentially negate BLM employee's time as well as dollars entrusted by the public to be spent wisely. Cumulatively Exxon's development program has in the past impacted 0.65 acres of the powerline project, this project will impact 2 acres, and CO-110-2006-002-EA is proposed to construct a 5.5 acre pad and associated disturbance is yet to be finalized but at a minimum will impact an additional 2 acres.

Environmental Consequences of the No Action Alternative: None

Mitigation: For the proposed action a hydro-ax or other mulching type machine must be used to remove the existing cover of trees for the pad and access road. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and scatters the debris, thereby eliminating any hazardous fuel load adjacent to the new road and well pad which could hinder wildfire suppression efforts to protect the 138Kv powerline that the pad will be adjacent to.

To address the cumulative impact to the powerline project Exxon should consider a cost reimbursement program so that the BLM fuels and wildlife program can implement some off site mitigation to address the ecological change from the big sagebrush/mountain browse vegetation type to pinion-juniper. The costs would be calculated on an acre for acre basis at current 2006 costs for treatment to be determined by BLM personnel.

FOREST MANAGEMENT

Affected Environment: The well pad, pipeline and access road are within middle-aged pinyon/juniper woodlands. This stand is considered commercial, based on quality production

and accessibility. Along the north edge of the well pad a fuel reduction project was completed in 2003 for protection of the powerline (see the above fire management section for a discussion). Within the White River ROD/RMP a limit of 25 acres per year for clearcutting of woodlands is permitted. These stands are also used by the local population as a source of firewood and fence posts, and are authorized under personal use permits.

Environmental Consequences of the Proposed Action: Under the proposed action 7.5 acres of woodland would be removed. The estimated volume of material removed is estimated at 82.5 cords. The removal of woodland resources is within that established within the land use plan. Following reclamation pinions and junipers are expected to reoccupy the site and develop into mature woodlands. Establishment is expected to take up to 30 years and mature woodlands developing in 250+ years. With the mitigation listed below there would not be problems with disease/insects or vehicle use along the pipeline.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: The applicant will be billed for the forest materials removed as described by the proposed action. Forestry concurs with mitigation proposed by fire management. This would also decrease the opportunity for an outbreak of pine beetle.

GEOLOGY AND MINERALS

Affected Environment: The surface geologic formation of the well locations is Uinta and ExxonMobil's targeted zone is in the Mesaverde. During drilling potential water, oil shale, sodium, and gas zones will be encountered from surface to the targeted zone. Aquifers that will be encountered during drilling are the Perched in the Uinta, the A-groove, B-groove and the Dissolution Surface in the Green River formation. These aquifer zones along with the Wasatch formation are known for difficulties in drilling and cementing. Oil shale and sodium resources are located in the Green River formation. The bottom hole locations are located on Federal oil and Gas Leases COD-035729 and COD-035705 in the Piceance Creek Unit COC47666X.

Environmental Consequences of the Proposed Action: The cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, water, and oil between formations. This includes oil shale and coal zones. However, conventional recovery of the coals is not considered feasible at the depths that are encountered in the well. Development of this well will deplete the natural gas resources in the targeted formation

Environmental Consequences of the No Action Alternative: The natural gas resources in the targeted zone would not be recovered at this time.

Mitigation: None

PALEONTOLOGY

Affected Environment: The proposed pad location is located in an area generally mapped as the Uinta Formation (Tweto 1979) which the BLM has classified as a Condition 1 formation meaning it is know to produce scientifically important fossil resources.

Environmental Consequences of the Proposed Action: If it becomes necessary to excavate into the underlying rock formation to level the well pad or excavate the reserve/blooie pit there is a potential to impact scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. A paleontological monitor shall be present prior to the initiation of all excavations into the underlying rock formation.

RANGELAND MANAGEMENT

Affected Environment: The proposed action occurs within the Hatch Gulch allotment (06028) which is authorized for livestock use by the C.W. Brennan livestock operation as follows:

Allotment		Permit Number	Livestock		Period of Grazing	% BLM	AUMs
Number	Name		#	Kind			
06028	Hatch Gulch	051422	150	C	11/01-11/30	100	148
			300	C	12/01-12/31	100	306
			150	C	01/01-01/31	100	153

Environmental Consequences of the Proposed Action: The proposed action will result in the long term loss of up to 1 animal unit month (AUM) of forage production due to vegetation removal/soil disturbance.

Environmental Consequences of the No Action Alternative: There will be no change in the present situation.

Mitigation: See VEGETATION MANAGEMNT for recommended mitigation.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The proposed project area has been delineated a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 6 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action would be located in an area with a VRM III classification. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would be located below the crest of a ridge on a long point that is elevated above and not visible from county road RBC 5, which would be the route traveled by a casual observer. Since the well pad would be near the top of a ridge and surrounded by pinyon/juniper woody vegetation, the production facilities should be painted Juniper Green to blend with and mimic the surrounding and distant vegetation types. The level of change to the characteristic landscape would be low and the objectives of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no environmental consequences.

Mitigation: All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed above ground shall be painted Juniper Green within six months of installation.

CUMULATIVE IMPACTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of these activities are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

To address the cumulative impact to the powerline project Exxon should consider a cost reimbursement program so that the BLM fuels and wildlife program can implement some off site mitigation to address the ecological change from the big sagebrush/mountain browse vegetation type to pinion-juniper. The costs would be calculated on an acre for acre basis at current 2006 costs for treatment to be determined by BLM personnel.

REFERENCES CITED:

Metcalf, Sally J.
2005 Exxon-Mobil Corporation's Proposed Gas Drill Pads T75X-3G, T35X-2G, PCU 297-11B, PCU 297-10A and PCU 297-15A, Class III Cultural Resources Inventory, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Tweto, Ogden
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation, Rangeland Management
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Melissa Kindall	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2006-009-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the proposed action with the mitigation listed below. The proposed action is in conformance with all applicable decisions in the White River RMP, and would not be expected to result in unnecessary or undue degradation of the public lands or resources.

MITIGATION MEASURES:

1. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive particulate matter, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing the roadway with gravels will also help mitigate production of fugitive particulate matter.

2. To reduce production of fugitive particulate matter originating from well pads and associated stockpiled soils (long term storage) interim reclamation will be required. Interim reclamation will consist of all excess stockpiled soils associated with pad construction being pulled back over the portion of the well pad not being utilized for production facilities and access. Portions of the well pad undergoing interim reclamation will be returned to grade (as close as possible), promptly re-seeded, and biodegradable fabrics will be utilize on slopes exceeding 5%.

3. If interim reclamation is not practical (e.g. completion of drilling operation will require an extended period time (multiple well pads)), stockpiled soils will be covered with biodegradable fabrics such as (but not limited to) jute netting and seeded with the appropriated seed mixture. Furthermore, soils stockpiled for short durations (e.g. during road/pipeline construction/maintenance) will be wetted during dry periods to reduce production of fugitive particulate matter.

4. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

5. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

6. The operator will be required to monitor the project area for a minimum of three years post disturbance and eradicate all noxious and invasive species which occur on site using materials and methods approved in advance by the Authorized Officer.

7. The operator shall prevent use by migratory birds of reserve pits that store or are expected to store fluids which may pose a risk to such birds (e.g., migratory waterfowl, shorebirds, wading birds and raptors) during completion and after completion activities have ceased. Methods may include netting, the use of bird-balls, or other alternative methods that effectively prevent bird use and that meet BLM approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to prevent bird use two weeks prior to beginning completion activities. The BLM-approved method will be applied within 24 hours after completion activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineering Technician immediately.

8. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

9. The operator will be responsible for complying with all local, state, and federal water quality regulations as well as providing documentation to the BLM that they have done so. Any upgrades to the existing road and well pad must strictly adhere to “Gold Book” surface operating

standards for oil and gas exploration and development. Corrugated metal pipes (CMPs) are not recommended on slopes less than 10% and will NOT be used as drainage relief structures for stream crossings/gullies or to drain inside drain ditches on slopes less than 3%. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations.

10. Energy dissipaters such as large gravels/small cobbles will be used at culvert and drainage dip outlets to minimize additional erosion. To mitigate water being channelized down the roadway, all activity must stop when soils or road surfaces become saturated to a depth of three inches. Mud blading will be prohibited in attempts to reduce further soil displacement. Any upgrades or damage to the existing access road will be upgraded or repaired at the expense of the operator. Furthermore, following abandonment of the well pad all disturbed surfaces will be recontoured to the original grade promptly covered with a sufficient amount of woody debris and seeded with the appropriate seed mixture as outlined in the vegetation section of this document.

11. To mitigate surface erosion at well pads, interim reclamation will be required. Interim reclamation will consist of all excess stockpiled soils associated with pad construction being pulled back over the portion of the well pad not being utilized for production facilities and access. Portions of the well pad undergoing interim reclamation will be returned to grade (as close as possible), promptly re-seeded, and biodegradable fabrics will be utilize on slopes exceeding 5%.

12. If interim reclamation is not practical (e.g. completion of drilling operation will require an extended period time (multiple well pads)), stockpiled soils will be covered with biodegradable fabrics such as (but not limited to) jute netting and seeded with the appropriated seed mixture.

13. To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under pumping equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, all pits must have a liner and all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed to reduce potential for contamination.

14. Comply with Interim reclamation will be required as addressed in the Air and Water Quality portions of this document. Complete reclamation will follow abandonment of well pad. Access road and well pad will be recontoured and 100% of disturbed surfaces will be revegetated with the suggested seed mixture as outlined in the vegetation section of this document.

15. Promptly revegetate all disturbed areas not necessary for production with Native Seed mix #3. Revegetation will commence immediately after construction and will not be delayed until the following fall and will include cut and fill slopes and access road borrow ditches and slopes. Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application. Debris will not be scattered on the pipeline until after seeding operations are completed.

Seed Mix #	Grass Species	Lbs PLS/Ac	Ecological Site
3	Western wheatgrass (Rosanna) Bluebunch wheatgrass (Whitmar)	2 2	Gravelly 10"-14", Pinyon/Juniper

Seed Mix #	Grass Species	Lbs PLS/Ac	Ecological Site
	Needle and thread	1	Woodland, Stony
	Indian ricegrass (Rimrock)	2	Foothills, 147
	Fourwing saltbush (Wytana)	1	(Mountain
	Utah sweetvetch	1	Mahogany)

16. Evidence suggests that nesting goshawk remain in areas subject to disturbance by the proposed action. The proposed action is subject to a timing limitation that would restrict any activity associated with the development of this well to periods outside the goshawk nesting season of April 1 through July 31. In the event the birds fledge young and leave the area prior to this date, a modification to the timing limitation would be allowed. This project site will be surveyed by BLM during the winter of 2006 to determine whether northern goshawks continue to occupy nest sites in the vicinity of this pad. The final decision to impose or remove this requirement (through an exception) will be made by BLM after follow-up surveys are completed.

17. The use of interim reclamation techniques will be used to the extent practicable on this pad such that:

- all available topsoil material would be used to rehabilitate recontoured cut and fill slopes and areas outside the anchors (maintaining the viability of the soils for final reclamation),
- production facilities are located to maximize the extent of surface disturbance available for recontouring and reclamation after completion operations and through the productive life of the well (e.g., where access road enters pad), and 3) disturbed areas are recontoured, revegetated, and, if necessary, effectively fenced to control livestock use once well completion activities have been finalized (this includes cut and fill slopes of roads and trial application on the roadbeds themselves).

18. BLM 1175 should be maintained to BLM road maintenance level 3 by project proponent. In addition, a gate should be installed where new pad access roads leaves BLM 1175 to assure no unauthorized motorized traffic utilizes new road.

19. For the proposed action a hydro-ax or other mulching type machine must be used to remove the existing cover of trees for the pad and access road. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and scatters the debris, thereby eliminating any hazardous fuel load adjacent to the new road and well pad which could hinder wildfire suppression efforts to protect the 138Kv powerline that the pad will be adjacent to.

20. To address the cumulative impact to the powerline project Exxon should consider a cost reimbursement program so that the BLM fuels and wildlife program can implement some off site mitigation to address the ecological change from the big sagebrush/mountain browse vegetation type to pinion-juniper. The costs would be calculated on an acre for acre basis at current 2006 costs for treatment to be determined by BLM personnel.

21. The applicant will be billed for the forest materials removed as described by the proposed action. Forestry concurs with mitigation proposed by fire management. This would also decrease the opportunity for an outbreak of pine beetle.

22. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

23. A paleontological monitor shall be present prior to the initiation of all excavations into the underlying rock formation.

24. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed above ground shall be painted Juniper Green within six months of installation.

NAME OF PREPARER: Keith Whitaker

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 01/27/06

ATTACHMENTS: Location Map of the Proposed Action.

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Location Map of the Proposed Action
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